

**In The Claims:**

This list of claims will replace all prior versions and listings of claims in the application. Please amend the claims as set forth below.

1. (Currently amended) An ultrapure water production plant producing ultrapure water by introducing primary pure water as liquid to be processed, comprising:  
an ultraviolet oxidation equipment; and  
a catalyst mixed tower located in the downstream of the ultraviolet oxidation equipment and having catalyst supports each of which has a catalyst carried on a support, [[and]] the catalyst mixed tower also having anion exchange resins for ion exchange.
2. (Original) The ultrapure water production plant according to Claim 1, wherein a membrane degasser and a demineralization equipment are located in the downstream of the catalyst mixed tower.
3. (Currently amended) The ultrapure water production plant ~~claimed in~~ according to Claim 2, wherein the demineralization equipment is an ion exchange resin tower comprising a mixed bed in which the anion exchange resins and cation exchange resins are mixed.
4. (New) The ultrapure water production plant according to Claim 3, wherein a ratio of the catalyst supports to the anion exchange resins is between 3% and 20% by weight.
5. (New) The ultrapure water production plant according to Claim 3, wherein a ratio of the catalyst supports to the anion exchange resins is between 8% and 13% by weight.
6. (New) The ultrapure water production plant according to Claim 3, wherein the catalyst decomposes hydrogen peroxide.

7. (New) The ultrapure water production plant according to Claim 6, wherein the catalyst is selected from palladium, manganese dioxide, ferric chloride or an alloy thereof.

8. (New) The ultrapure water production plant according to Claim 3, wherein the support is selected from ion exchange resin, active carbon, alumina or zeolite.

9. (New) The ultrapure water production plant according to Claim 8, wherein the ion exchange resin is an anion exchange resin.

10. (New) The ultrapure water production plant according to Claim 9, wherein the catalyst supports are spherical catalyst supports which are carried with the anion exchange resin.

11. (New) The ultrapure water production plant according to Claim 3, wherein the anion exchange resins are strong base anion exchange resins.

12. (New) The ultrapure water production plant according to Claim 11, wherein a substrate of the anion exchange resins is selected from styrene origins, acrylic origins, meta-acrylic origins, or phenol origins.

13. (New) The ultrapure water production plant according to Claim 12, wherein the substrate of the anion exchange resins have a structure which is selected from a gel type, a porous type, or a high porous type.

14. (New) The ultrapure water production plant according to Claim 3, wherein the catalyst mixed tower holds the anion exchange resins and the catalyst supports in a mixed state.

15. (New) The ultrapure water production plant according to Claim 3, wherein the catalyst mixed tower holds the anion exchange resins and the catalyst supports separately.
16. (New) The ultrapure water production plant according to Claim 15, wherein the catalyst mixed tower is a layered bed type holding a catalyst support layer located on an inflow side of the liquid to be processed and an anion exchange resin layer located on an outflow side of the liquid.
17. (New) The ultrapure water production plant according to Claim 3, wherein the catalyst mixed tower further includes cation exchange resins.
18. (New) The ultrapure water production plant according to Claim 3, wherein a velocity of the liquid to be processed toward the catalyst mixed tower is set at approximately  $SV = 10$  to  $200 \text{ hr}^{-1}$ .
19. (New) The ultrapure water production plant according to Claim 18, wherein a direction of the liquid to be processed is set to downflow.
20. (New) The ultrapure water production plant according to Claim 3, wherein the primary pure water has a resistivity equal to or greater than  $10 \text{ M}\Omega\cdot\text{cm}$ , a dissolved oxygen concentration of 0 to  $1000 \text{ }\mu\text{g/L}$ , an organic compounds concentration of 0 to  $20 \text{ }\mu\text{g/L}$ , and a metal concentration of 0 to  $1 \text{ }\mu\text{g/L}$ .